Amendment to the Claims:

1. (Withdrawn) A targeting construct comprising:
    a. a first polynucleotide sequence homologous to a nuclear hormone receptor gene;
    b. a second polynucleotide sequence homologous to the nuclear hormone receptor gene; and
    c. a selectable marker.
2. (Withdrawn) The targeting construct of claim 1, wherein the targeting construct further comprises a screening marker.
3. (Withdrawn) A method of producing a targeting construct, the method comprising:
    a. providing a first polynucleotide sequence homologous to a nuclear hormone receptor gene;
    b. providing a second polynucleotide sequence homologous to the nuclear hormone receptor;
    c. providing a selectable marker; and
    d. inserting the first sequence, second sequence, and selectable marker into a vector, to produce the targeting construct.
4. (Withdrawn) A method of producing a targeting construct, the method comprising:
    a. providing a polynucleotide comprising a first sequence homologous to a first region of a nuclear hormone receptor gene and a second sequence homologous to a second region of a nuclear hormone receptor gene;
    b. inserting a positive selection marker in between the first and second sequences to form the targeting construct.

Claims 5-9 (Canceled)

10. (Withdrawn) A method of producing a transgenic mouse comprising a disruption in a nuclear hormone receptor gene, the method comprising:
    (a) introducing the targeting construct of claim 1 into a cell;
    (b) introducing the cell into a blastocyst;
    (c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and
    (d) breeding the chimeric mouse to produce the transgenic mouse.

Claims 11-15 (Canceled)

16. (Withdrawn) An agent identified by the method of claim 11, claim 12, claim 13, or claim 14.

Claims 17-19 (Canceled)

30. (Withdrawn) A method of producing a transgenic mouse comprising a disruption in a nuclear hormone receptor gene, wherein the transgenic mouse exhibits at least one of the following phenotypes: spleen abnormality, an abnormality of the thymus, or an abnormality in the lymph nodes, the method comprising:

(a) introducing a nuclear hormone receptor gene targeting construct into a cell;

(b) introducing the cell into a blastocyst;

(c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and

(d) breeding the chimeric mouse to produce the transgenic mouse comprising a disruption in a nuclear hormone receptor gene.

Claims 31-35 (Canceled)

36. (Withdrawn) The method of claim 35, wherein the phenotype comprises at least one of the following: a spleen abnormality, an abnormality of the thymus, or an abnormality in the lymph nodes.

37. (Withdrawn) An agent identified by the method of claim 32, claim 33, claim 34, or claim 35.

38. (Withdrawn) A transgenic mouse comprising a disruption in a nuclear hormone receptor gene, wherein the transgenic mouse exhibits decreased coordination and balance relative to a wild-type mouse.

Claim 38 (Canceled)

39. (previously presented) A transgenic mouse whose genome comprises a homozygous disruption in a gene encoding mCAR2, wherein as a result of the disruption, the transgenic mouse lacks production of functional protein encoded by said gene and exhibits, relative to a wild-type mouse, impaired coordination or balance, a spleen abnormality, a thymus abnormality or a lymph node abnormality.

40. (previously presented) The transgenic mouse of claim 39, wherein the impaired coordination or balance comprises decreased performance in a rotarod test.

41. (previously presented) The transgenic mouse of claim 39, wherein the spleen abnormality comprises decreased spleen size.

42. (previously presented) The transgenic mouse of claim 39, wherein the spleen abnormality comprises reduced spleen weight.
43. (previously presented) The transgenic mouse of claim 39, wherein the spleen abnormality comprises reduced spleen to body weight ratio.
44. (previously presented) The transgenic mouse of claim 39, wherein the spleen abnormality comprises lymphoid depletion of the spleen.
45. (previously presented) The transgenic mouse of claim 39, wherein the thymus abnormality comprises reduced thymus size.
46. (previously presented) The transgenic mouse of claim 39, wherein the thymus abnormality comprises reduced thymus weight.
47. (previously presented) The transgenic mouse of claim 39, wherein the thymus abnormality comprises reduced thymus to body weight ratio.
48. (previously presented) The transgenic mouse of claim 39, wherein the thymus abnormality comprises lymphoid depletion in the thymus.
49. (previously presented) The transgenic mouse of claim 39, wherein the lymph node abnormality comprises lymphoid depletion.
50. (previously presented) The transgenic mouse of claim 39, wherein the lymph node abnormality comprises reduced lymph node size.

Claims 51-52 (Canceled)

53. (New) A transgenic mouse whose genome comprises a null endogenous mCAR2 allele; said null allele comprising exogenous DNA.
54. (New) The transgenic mouse of claim 53 wherein said mouse is heterozygous for said null allele.
55. (New) The transgenic mouse of claim 53 wherein said mouse is homozygous for said null allele.
56. (New) The transgenic mouse of claim 53 wherein said exogenous DNA comprises a gene encoding a selection marker.
57. (New) The transgenic mouse of claim 56 wherein said gene is a neomycin resistant gene.